



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,268	10/21/2003	Bahman Moradali Mehdizadeh		4586

31688 7590 10/03/2005

TRAN & ASSOCIATES  
6768 MEADOW VISTA CT.  
SAN JOSE, CA 95135

EXAMINER

WERNER, JONATHAN S

ART UNIT PAPER NUMBER

3732

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/690,268	<b>Applicant(s)</b> MEHDIZADEH, BAHMAN MORADALI	
	<b>Examiner</b> Jonathan Werner	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Drawings***

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because of a lack of clarity. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. Additionally, the drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the presence of multiple dental instruments must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

Art Unit: 3732

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

4. Claims 18-20 are objected to because of the following informalities: each method claim is dependent on claim 1 which is an apparatus claim. Appropriate correction is required. However, for the basis of this Office Action, it is assumed that said method claims were intended to be dependent on method claim 11.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3732

5. Claims 1-6, 8-9, 11-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann (6,152,733) in view of Cooper (5,429,502). In re claim 1, Hegemann discloses an intra-oral dental device comprising a housing over one or more teeth (50, 52), a moveable dental head (74), one or more dental instruments coupled to the dental head (75), and a conduit to remove debris (41). Hegemann, however, lacks both a camera and a computer that has a display and input device. Cooper teaches the use of an intra-oral camera (10) attached to the dental head (col 1 ln 59) as well as a computer having both a display (6) and an input device (9). Therefore, it would be obvious to one having ordinary skill in the art at the time of applicant's invention to add an intra-oral camera and a computer with a display and input device to the dental device disclosed by Hegemann in order to view images of the corresponding dental workspace on the display for video monitoring of the task being performed by the dentist as taught by Cooper. In re claims 2 and 3, Cooper discloses a fluid source and a fluid conduit operatively connected between said fluid source and the head wherein the fluid source is either air or water (col 5 ln 3-11). In re claims 4 and 5, Cooper discloses that the dental instruments can include a drill (col 2 ln 25) and that dental instruments are interchangeable (col 5 ln 64). In re claim 6, Cooper discloses that the dental instrument also includes light sources (col 2 ln 4). In re claims 8 and 9, Hegemann discloses a motor (col 6 ln 44-48, col 9 ln 46-50) to move the dental head and tilt the dental instruments (Figures 19-22). As to claims 11-16 and 18-19, according to the intra-oral dental device previously disclosed by Hegemann and Cooper, it would be obvious to one having ordinary skill in the art to use said device in the manner intended during a

Art Unit: 3732

procedure by displaying images on a screen, receiving an input responsive to a user command, moving the dental head in response to the user command and actuating the dental instruments in accordance with said command.

6. Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann in view of Cooper further in view of de Mul (4,035,918). Hegemann and Cooper disclose an intra-oral dental device as previously described, however, they fail to show the dental instruments are actuated independently of each other. de Mul teaches that the dental instruments can be driven independently (col 3 ln 37-41). Therefore, it would be obvious to one having ordinary skill in the art at the time of applicant's invention to actuate the dental instruments independently of each other in order to reduce the exchange time between removing instruments so as to perform the dental treatment more efficiently as taught by de Mul.

7. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegemann in view of Cooper further in view of Moermann (4,575,805). Hegemann and Cooper disclose an intra-oral dental device as previously described, however, they fail to show the input device comprises a joystick and a button. Moermann teaches a joystick (195) with a push button (199). Therefore, it would be obvious to one having ordinary skill in the art at the time of applicant's invention to make the input device comprise a joystick and button in order to manipulate images on the display taken from the dental procedure so as to more precisely maneuver the head and activate the dental instrument as taught by Moermann.

Art Unit: 3732


**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steddin (6,506,050), Wagner (6,247,477), Elbaum (6,201,880), Schwalbach (5,018,967), Rhoades (4,802,851), and Monroe (5,662,586) all disclose pertinent prior art related to the applicant's invention.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jonathan Werner  
Examiner  
AU 3732

JSW  
9/22/05

  
MELBA N. BUMGARNER  
PRIMARY EXAMINER